On June 19th, at Chalfont Road, I met with a case spun up on the stem of a wild rose, between the thorns. This produced an image on June 29th.

Butterflies in South Germany during the Spring and Early Summer of 1906.

By G. L. KEYNES.

As it had been arranged that I should spend five months of the first half of 1906 (February 1st-June 24th) in South Germany, I determined that a study of the German language should be judiciously and pleasantly combined with a study, as far as possible, of the butterflies of the district. The former study, however, I dutifully regarded as the more important, and this must serve to account for the incompleteness of the following note.

My headquarters were at a small manufacturing town called Lahr, some thirty miles north of Freiburg. The nature of the country is varied; for, on the one hand, are the heights of the Black Forest, on the other the absolutely level plain of the Rhine Valley. The latter I found to be incomparably the more productive, for, on it, tracts of luxuriant cultivation alternate with large wooded districts, formed of the kind of vegetation interesting to entomologists; the Black Forest, on the other hand, is composed almost entirely of beech trees and

gloomy pines, which have little attraction for butterflies.

The more interesting species occurred as follows:—Erynnis alcaeae: I took a single fresh 3 on May 4th in a clearing in the Black Forest; I was unable to visit the spot again. Hesperia malvae: This species occurred occasionally in the Forest, and from May 10th onwards was very plentiful in the plain. Powellia sao appeared to be scarce, as I took only one worn 2; this was on June 7th, on the outskirts of the Forest. Cyclopides palaemon appeared on May 11th, and was locally plentiful in the woods of the plain; I also found it occasionally elsewhere up to the edge of the Forest. Loweia dorilis was common everywhere in the plain from the middle of May, the 2s being particularly fine and bright. Cupido minima and Nomiades semiargus were both locally plentiful on small limestone hills at the edge of the plain, and also occurred occasionally elsewhere. They appeared at the end of May. Nomiades cyllarus was rare, and my only capture was a single large, but rather worn, 2 on May 26th, on the limestone hills mentioned above. Polyommatus bellargus I took occasionally during June at the edge of the plain. Plebeius argus (aegon) was very plentiful in the plain, especially so on the banks of the Rhine. Plebeius argyrognomon was sometimes to be found in the plain, but was very much rarer than the preceding species. The two or three 2 s which I took were of the form brunnea. Everes argiades: My only captures of this species were two fresh & s on May 11th and May 13th. They were found flying in the grass meadows of the plain, and, in size (24mm.), they come between the var. polysperchon and the type, the sizes of which Mr. Wheeler gives as 20mm. and 29mm. respectively. Callophrys rubi appeared early in May, but was confined entirely to clearings in the Forest and its immediate outskirts. One or two specimens approach very nearly to ab. immaculata. Strymon pruni: On June 6th I took one perfect 3 of this species close to the Rhine; owing to the bad weather I was unable to visit the place again until June 18th. I then discovered a tract of low privet bushes in bloom, on the flowers of which the pruni were sitting in scores. The 3 s were then over, but I was able to get a good series of ?s, which are larger than English specimens, and have a great deal more orange on the forewing. S. w-album: On June 18th and June 21st I took four fresh specimens, sitting with S. pruni on the privet blossoms. Papilio podalirius was common in the Forest. but scarcer in the plain. One specimen of ab. ornata measured 85mm. across the wings. Aporia crataegi was very abundant in the plain. All the specimens were ab. suffusa, and a few approached ab. melaina. Dryas paphia and Argynnis aglaia were sometimes to be seen near the Rhine. Specimens of Issoria lathonia seemed to be not at all common, as I saw only one. Brenthis euphrosyne was locally very plentiful in the woods of the plain, and was occasionally to be found The specimens are large and of a rather washed-out This insect appeared first on May 4th. B. selene was also locally abundant in the same localities as the preceding species, but did not appear till that species was getting over. One 3 was much suffused with black. B. dia appeared early in May, and was locally common in the woods of the plain. It was very variable in the markings of the upperside, exhibiting every degree of confluence of the spots. Melitaea aurinia was very plentiful during May in the meadows of the plain, and showed considerable variation; the majority of the specimens, however, approximated to var. artemis in the uniformity of the ground colour. The ?s appeared to be very scarce in comparison with the great abundance of 3 s. M. cin.via, M. parthenie, and M. dictynna were all common near the Rhine, but were not nearly so plentiful as M. aurinia in the ordinary meadows. Araschnia levana was very scarce; the only specimen I saw was on May 14th in one of the woods of the plain. Eugonia polychloros: Hybernated specimens appeared on the first warm day in March, and were afterwards very plentiful in the gardens of the town. Limenitis sibulla first appeared on June 21st, and, close to the Rhine, was very abundant. Pararge moera was occasionally to be found near the Rhine during June. P. achine, after June 18th, was very common near the Rhine, but did not show any variation. Coenonympha hero occurred in the plain, but was scarce and local. On May 31st I took five fresh 3s, and on June 18th two worn 2s. These specimens vary only in possessing one, two, or no eyespots on the underside of the front wing. C. pamphilus was common everywhere. The specimens are small, but show a decided tendency towards exaggeration of the markings, ab. bipupillata and ab. ocellata being by no means rare. One specimen has even a third eyespot near the anal angle. Erebia medusa was very scarce, and my only capture was a very worn 3, on June 7th, at the edge of the plain. E. stygne: I took two very fresh & s in the Black Forest on June 17th. Melanargia galatea was very common close to the Rhine, but not elsewhere. The following species were common everywhere and are not worthy of special mention: - Nisoniades tages, Augiades sylvanus, Polyommatus aleris, Celastrina argiolus, Papilio machaon, Pieris brassicae, P. rapae, P. napi, Euchloë cardamines, Leucophasia sinapis, Colias hyale, Gonopteryx rhamni, Pyrameis cardui, Euvanessa antiopa, Vanessa io, Aglais urticae, Polygonia c-album, Pararge meguera, P. egeria var. egerides, Epinephele jurtina. Thus the total number of species taken between February 1st and June 24th was 57, and to get these I never went more than ten miles from Lahr. It may perhaps be worth recording that a local collector has taken *Chrysophanus rutilus* on one of the mountains near the town.

Contribution to a List of the Macro-Lepidoptera of Wimbledon

By G. D. MILLWARD.

As supplementary to the notes by Mr. Smallman (anteà, pp. 40-42), I offer the following contribution to the list of macro-lepidoptera

occurring on Wimbledon Common :-

Hylophila prasinana, one larva beaten from oak, September 25th, 1904. Hylophila bicolorana, two larvae beaten from oak, May 28th, 1904; these spun up May 29th, and imagines emerged June 22nd and 28th respectively; also five young larvae off the same tree at the end of September, but these all died during hybernation; two more young larvae September, 1905, these also died.

Nolides.—Nola cucullatella, one, July, 1904.

ARCTHDES. — Euchelia jacobaeae, one seen on the wing, June, 1904, and one at light, July, 1905. Spilosoma mendica, one, June 12th, 1905.

Hepialides.—Hepialus humuli, occasionally at dusk.

Lymantrides.—Porthesia similis, common at dusk, also larvæ on

oak, etc.

Drepanulides.—Drepana lacertinaria, one on wing, May 23rd, 1904; also at light, June, 1904, 1905, and 1906; one larva beaten from birch, September, 1904, and one September, 1905. Drepana falcataria, one at light, July 10th, 1906. Drepana binaria, one on lamp early in morning, May 28th, 1904; occasionally at light, June, 1905 and 1906; two or three larvæ off oak, September, 1904, 1905, and 1906.

Notodontides.—Dicranura bifida, one, on a lamp in the morning, June 1st, 1905. Lophopteryx camelina, occasionally at light, June, 1905 and 1906; a few larvæ off oak, September, 1904 and 1905; three pupæ at roots of oak, April, 1905. Notodonta dictaea, one on a lamp in the morning, May 2nd, 1905. Notodonta dodonea, two on a lamp in the morning, June 13th, 1905. Phalera bucephala, at light, June, and larvæ in September.

CYMATOPHORIDES.—Thyatira derasa, one larva off bramble, September, 1905; Thyatira batis, one at sugar, September, 1904. Cymatophora duplaris, one larva beaten from birch, October, 1904.

Noctudes.—Bryophila perla, two at light, June 28th, 1905. Diloba caeruleocephala, two larvæ off hawthorn, one June, 1905, one June, 1906. Leucania conigera, occasionally at light, July. Leucania comma, one at light, July 1st, 1904. Leucania impura, occasionally at light, June-July. Leucania pallens, very common at light, and flying round long grass and rushes on low-lying part of the Common. Tapinostola fulva, one specimen drying its wings on grass, 10 p.m., September 6th, 1905. Hydroecia nictitans, not uncommon at light and sugar, end of July-September. Xylophasia lithoxylea, one on a tree-trunk, July 14th, 1906. Xylophasia monoylypha, at sugar. Dipterygia scabriuscula, occasionally at sugar, June, 1906. Neuronia popularis, a few at light, September, 1904. Cerigo matura, occasionally